WHAT IS CLAIMED IS:

1. An end cap for a segment of a stator in an electromagnetic machine, the machine having a plurality of interconnect wires, the segment having a yoke portion and having a tooth portion with a winding coil wound thereon, the end cap comprising:

a body portion positioning adjacent the yoke portion and having an inboard side;

an inboard wall positioning adjacent the tooth portion such that the winding coil wound on the tooth portion is at least partially positioned between the inboard wall and the inboard side of the body portion;

at least one router positioned on the end cap for routing one or more of the interconnect wires between portions of the stator, the at least one router capable of separating the interconnect wires when routed adjacent one another on the at least one router.

2. The end cap of claim 1, wherein the inboard wall extends a first height from the tooth portion that is substantially equivalent to a second height that the inboard side of the body portion extends from the yoke portion.

3. The end cap of claim 1, wherein the at least one router is positioned on the inboard wall of the end cap and extends from a side edge of the inboard wall.

4. The end cap of claim 1, wherein the at least one router is positioned on the body portion of the end cap.

5. The end cap of claim 4, wherein the end cap has a wire pocket for holding a portion of one of the interconnect wires, and wherein the at least one router positioned on the body portion of the end cap is capable of routing the interconnect wire between the wire pocket and other portions of the stator.

6. The end cap of claim 1, wherein the at least one router includes first and second ledges for separating at least two of the interconnect wires when routed adjacent one another on the at least one router.

7. The end clap of claim 6, wherein the first ledge is capable of routing one of the adjacent wires a further distance from the stator, and wherein the second ledge is capable of routing another of the adjacent wires a closer distance from the stator.

8. The end clap of claim 6, wherein the at least one router includes a hook for positioning at least one of the interconnect wires on at least one of the ledges.

9. The end clap of claim 6, wherein the at least one router defines a notch for positioning at least one of the interconnect wires on at least one of the ledges.

10. The end cap of claim 1, wherein the at least one router is positioned on an outboard surface of the inboard wall.

11. The end cap of claim 9, wherein the at least one router positioned on the outboard surface of the inboard wall includes first and second ledges positioned adjacent opposite side edges of the inboard wall for separating at least two of the interconnect wires when routed adjacent the outboard surface of the inboard wall.

12. A stator for an electromagnetic machine having a plurality of interconnect wires and a winding coil, comprising:

a segment of the stator having a yoke portion and having a tooth portion with the winding coil wound thereon;

an end cap comprising:

a body portion positioning adjacent the yoke portion and having an inboard side;

an inboard wall positioning adjacent the tooth portion such that the winding coil wound on the tooth portion is at least partially positioned between the inboard wall and the inboard side of the body portion;

at least one router positioned on the end cap for routing one or more of the interconnect wires between portions of the stator, the at least one router capable of separating the interconnect wires when routed adjacent one another on the at least one router.

13. An end cap for a segment of a stator in an electromagnetic machine, the machine having a plurality of interconnect wires, the segment having a yoke portion and a tooth portion with a winding coil wound thereon, the end cap comprising:

a body portion positioning adjacent the yoke portion and having an inboard side;

an inboard wall positioning adjacent the tooth portion such that the winding coil wound on the tooth portion is at least partially positioned between the inboard wall and the inboard side of the body portion;

an inboard router positioned on the inboard wall and capable of routing one or more of the interconnect wires between portions of the stator.

14. The end cap of claim 13, wherein the inboard wall extends a first height from the tooth portion that is substantially equivalent to a second height that the inboard side of the body portion extends from the yoke portion.

15. The end cap of claim 13, wherein the inboard router extends from a side edge of the inboard wall.

16. The end cap of claim 13, wherein the inboard router includes first and second ledges for separating at least two of the interconnect wires when routed adjacent one another on the inboard router.

17. The end clap of claim 16, wherein the first ledge is capable of routing one of the adjacent wires a further distance from the stator, and wherein the second ledge is capable of routing another of the adjacent wires a closer distance from the stator.

18. The end clap of claim 16, wherein the inboard router includes a hook for positioning at least one of the interconnect wires on at least one of the ledges.

19. The end cap of claim 13, further comprising an outboard router positioned on the body portion of the end cap and capable of routing one or more of the interconnect wires between portions of the stator.

20. The end cap of claim 19, wherein the end cap has a wire pocket for holding a portion of one of the interconnect wires, and wherein the outboard router is capable of routing the one interconnect wire between the wire pocket and other portions of the stator.

21. The end cap of claim 19, wherein the outboard router includes first and second ledges for separating at least two of the interconnect wires when routed adjacent one another on the outboard router.

22. The end cap of claim 21, wherein the outboard router defines a notch for positioning at least one of the interconnect wires on at least one of the ledges.

23. The end cap of claim 13, wherein the inboard router is positioned on an outboard surface of the inboard wall.

24. The end cap of claim 23, wherein the second inboard router includes first and second ledges for separating at least two of the interconnect wires when routed adjacent one another on the inboard router.

25. The end cap of claim 23, wherein the first ledge is positioned adjacent the inboard router on one side edge of the inboard wall, and wherein the second ledge is positioned adjacent an opposite side edge of the inboard wall.

26. A stator for an electromagnetic machine having a plurality of interconnect wires and winding coils, comprising:

a plurality of segments of the stator, each segment having a yoke portion and having a tooth portion with one of the winding coils wound thereon;

a plurality of end caps, each end cap comprising:

a body portion positioning adjacent the yoke portion of one of the segments and having an inboard side such that the winding coil wound on the tooth portion is at least partially positioned adjacent the inboard side of the body portion,

a wire pocket formed in the end cap for holding an end of the winding coil and a portion of one of the interconnect wires, and

an edge positioned on the inboard side of the body portion and positioned adjacent the wire pocket on the end cap, the edge capable of bending the interconnect wire routed between the wire pocket and an another portion of the stator.

27. The stator of claim 26, wherein a tip of the edge extends beyond the body portion for positioning the interconnect wire in the wire pocket of the end cap during an automated procedure.

28. An electromagnetic machine, comprising:

a stator having a segment, the segment having a yoke portion and having a tooth portion with a winding coil wound thereon; and

an end cap positioned on the segment and including:

a body portion positioning adjacent the yoke portion,

an inboard wall positioning adjacent the tooth portion such that the winding coil wound on the tooth portion is at least partially positioned between the inboard wall and the body portion,

means positioned on the end cap for routing one or more interconnect wires between portions of the stator and for separating the interconnect wires from one another when routed adjacent one another on the end cap.

29. The machine of claim 28, wherein the end cap has a wire pocket for holding a portion of one of the interconnect wires, and wherein the end cap includes means on the end cap for bending the interconnect wire between the wire pocket and another portion of the stator.

30. The machine of claim 28, wherein the end cap has a wire pocket for holding a portion of one of the interconnect wires, and wherein the end cap includes means on the end cap for aligning the interconnect wire with the wire pocket when automatically inserting a connector into the pocket.

31. A method of stitching interconnect wire on a stator of an electromagnetic machine, the stator having winding coils and having a plurality of end caps positioned adjacent the winding coils, the method comprising the steps of:

a) routing the interconnect wire between portions of the stator such that portions of the interconnect wire overlap; and

b) separating the overlapping portions of the interconnect wire with the end caps.

32. The method of claim 31, wherein the step (a) comprises the step of routing the interconnect wire between the end caps of the stator having winding coils for one or more phases.

33. The method of claim 32, wherein routing the interconnect wire between the end caps of the stator having the winding coils for one phase comprises the step of:

inserting a portion of the interconnect wire into a wire pocket on a first of the end caps having an end of a first of the winding coils with the one phase positioned therein;

routing the interconnect wire to a second of the end caps having a second of the winding coils with the one phase; and

inserting a portion of the interconnect wire into a wire pocket on the second end cap having an end of the second winding coil positioned therein.

34. The method of claim 33, wherein inserting the portion of interconnect wire into the wire pocket comprises the step of bending the wire on an edge aligned with the wire pocket.

35. The method of claim 31, wherein the step (a) comprises the step of routing the interconnect wire between each of the end caps to create a common connection between each of the winding coils.

36. The method of claim 31, wherein the step (b) comprises the steps of:

routing one or more portions of the interconnect wire a further distance from the stator on one or more of the end caps; and

routing one or more portions of the interconnect wire a closer distance from the stator on one or more of the end caps,

whereby the overlapping portions of the interconnect wire are separated from one another on the stator.

37. The method of claim 31, wherein the step (b) comprises the step of passing a portion of the interconnect wire on one of at least two ledges positioned on the end cap, the at least two ledges being different distances from the stator.

38. The method of claim 37, further comprising the step of holding the interconnect wire on the one of the at least two ledges.